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- iv) determining the melting temperature of the amplicon; and
- v) identifying the sample as containing, or not containing, the vaginal epithelial cell based on the melting temperature of the amplicon corresponding to the genetic locus of SEQ ID NO: 1 in the genomic DNA isolated from the sample.

2. The method of claim 1, wherein the control sample is obtained from a known vaginal epithelial cell or a cell other than vaginal epithelial cell known to have methylation level at SEQ ID NO: 1 to be different from the methylation level at SEQ ID NO: 1 in the known vaginal epithelial cell.

3. The method of claim 1, wherein the cell other than vaginal epithelial cell is a buccal cell, a blood cell, or a sperm.

4. The method of claim 1, wherein the sample is a forensic sample.

5. The method of claim 1, wherein the sample is processed to separate a cell suspected to be the vaginal epithelial cell before step (i) of isolating the genetic material.

6. The method of claim 5, characterized in that the cell suspected to be the vaginal epithelial cell is isolated based on the cell being rich in glycogen compared to other cells in the sample.

7. A method for determining the level of methylation at the genetic locus of SEQ ID NO: 1 in a genomic DNA isolated from a cell, the method comprising the steps of:

- i) isolating the genomic DNA from the cell;

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- ii) treating the isolated genomic DNA with bisulfite;
- iii) PCR amplifying the genetic locus of SEQ ID NO: 1 to produce the corresponding amplicon, wherein the PCR amplifying is performed using a primer pair comprising SEQ ID NOs: 2 and 3; and

- iv) determining the melting temperature of the amplicon; and

- v) identifying the level of methylation at the genetic locus of SEQ ID NO: 1 in the genomic DNA isolated from the cell based on the melting temperature of the amplicon produced in step iii).

8. The method of claim 7, wherein the cell is isolated from a forensic sample.

9. The method of claim 8, wherein the cell isolated from the forensic sample is suspected to be a vaginal epithelial cell.

10. The method of claim 9, wherein the cell suspected to be the vaginal epithelial cell is isolated from the forensic sample based on the cell being rich in glycogen compared to other cells in the sample.

11. A kit comprising a primer comprising SEQ ID NO: 2 and a primer comprising SEQ ID NO: 3.

12. The kit of claim 11, further comprising one or more primer pairs of:

- ii) SEQ ID NOs: 7 and 8,
- iii) SEQ ID NOs: 12 and 13, or
- iv) SEQ ID NOs: 17 and 18.

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